

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A catadioptric projection objective for projecting a pattern arranged in the object plane of the projection objective into the image plane of the projection objective, ~~having~~comprising:
a first objective part ~~for~~ projecting an object field lying in the object plane into a first real intermediate image;
a second objective part ~~for~~ generating a second real intermediate image with the radiation ~~coming~~ from the first objective part;
a third objective part ~~for~~ generating a third real intermediate image with the radiation ~~coming~~ from the second objective part;
and
a fourth objective part ~~for~~ projecting the third real intermediate image into the image plane.
2. (currently amended): The projection objective as claimed in claim 1, wherein exactly three intermediate images are ~~provided~~generated.
3. (currently amended): The projection objective as claimed in claim 1, wherein two of the objective parts are catadioptric, each having ~~respectively have~~ a respective concave mirror.
4. (currently amended): The projection objective as claimed in claim 1, wherein the first objective part is refractive, wherein ~~and~~ the second objective part and the third objective part are

designed as catadioptric systems, each of the systems having a respective concave mirror, and wherein a respective mirror surface is assigned to each of the concave mirrors in order either to deflect the radiation toward the respective concave mirror or to deflect the radiation coming from the respective concave mirror ~~in the direction of~~ to a subsequent one of the objective ~~part~~parts.

5. (currently amended): The projection objective as claimed in claim 1, wherein all intermediate images ~~is~~are arranged ~~in the vicinity of~~proximate to a mirror surface.

6. (currently amended): The projection objective as claimed in claim 1, wherein all intermediate images are arranged ~~at a distance~~distant from a mirror surface.

7. (currently amended): The projection objective as claimed in claim 1, wherein ~~the~~a maximum distance of ~~an~~one of the intermediate ~~image~~images from a mirror surface is less than 10% of ~~the~~a total length of the projection objective.

8. (currently amended): The projection objective as claimed in claim 1, wherein the first objective part is ~~asymmetrically constructed~~asymmetrical.

9. (currently amended): The projection objective as claimed in claim 1, wherein the first objective part is at least essentially ~~constructed symmetrically~~symmetrical with respect to a plane perpendicular to the optical axis.

PRELIMINARY AMENDMENT

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10. (original): The projection objective as claimed in claim 1, wherein the first objective part has at least two lenses with lens surfaces that have the same radius.

11. (currently amended): The projection objective as claimed in claim 1, wherein the second objective part and the third objective part are asymmetrically constructed, one of the second and third objective parts being designed primarily for correcting ~~the~~ field curvature and the other of the second and third objective ~~part~~parts being designed primarily for ~~the~~ chromatic correction.

12. (currently amended): The projection objective as claimed in claim 1, wherein the second objective part and the third objective part are disposed essentially ~~constructed~~ symmetrically with respect to one another.

13. (original): The projection objective as claimed in claim 1, wherein a first catadioptric objective part has a first optical axis and a second catadioptric objective part has a second optical axis, and the first and second optical axes are arranged coaxially.

14. (original): The projection objective as claimed in claim 1, wherein a first catadioptric objective part has a first optical axis and a second catadioptric objective part has a second optical axis, and the first and second optical axes are arranged offset with respect to one another.